RECORD OF CONVERSATION

Date:	**May 10, 2017**
Time:	**Approximately 1800 eastern daylight time**
Location:	**Clearwater Beach, Florida**
Person Contacted:	**Peggy Browning** **Vice President of Maritime Systems** **exactEarth**
Subject:	**Weather Reporting from Maritime Vessels**

On May 10, 2017, at approximately 1800 eastern daylight time (EDT), Mike Richards and Doug Mansell from the NTSB had a conversation with Ms. Peggy Browning, Vice President of Maritime Systems at exactEarth. The conversation took place in Clearwater Beach, Florida. Ms. Browning reported the following:

ExactEarth currently operates 10 Automatic Identification System (AIS) satellites, and has partnered with Harris to provide and operate AIS hosted payloads on 58 new satellites for the Iridium NEXT constellation, scheduled to be launched in the near future. Due to exactEarth's satellites' polar-orbit strategies, their expected constellation of satellites will receive more AIS transmissions than other companies' satellites. However, between satellite providers, there is good global coverage of AIS broadcasts from vessels at sea.

In order for vessels at sea to provide automated reporting of weather on a large scale, mandates for new onboard equipment and carriage would be required. It might be beneficial to develop a "box" that accepts all weather information retrieved on a vessel, via both automated and manual methods, translates that information into the proper AIS format(s), and delivers the data to existing AIS equipment for dissemination. Developing standard interfaces to facilitate the input of weather sensing instrumentation to AIS equipment is important.

International efforts to establish a global standard for the VHF data exchange system (VDES) are well underway, and widely discussed by IALA, ITU, IMO, FCC, and other organizations. One challenge to these efforts is global acceptance of the allocation of frequencies for VDES transmissions. To prevent saturation of the AIS 1 and AIS 2 frequencies [161.975 MHz and 162.025 MHz, respectively], transmission of application specific messages (ASMs) are expected to move from AIS 1 and AIS 2, to ASM 1 and ASM 2 [161.950 MHz and 162.000 MHz, respectively]. In the US, these frequencies are within a band that is currently commercially licensed

by the FCC to a specific company; the license expires in 2018. As the application for license renewal approaches, some federal and commercial organizations may lobby the FCC to reserve specific frequencies, including ASM 1 and ASM 2, for VDES usage.

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